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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,830	03/31/2004	Charles Edward Baumgartner	134678/YOD GERD:0086	6500

7590 06/23/2006

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EXAMINER
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JAWORSKI, FRANCIS J

ART UNIT	PAPER NUMBER
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3768

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/814,830

Applicant(s)

BAUMGARTNER ET AL.

Examiner

Jaworski Francis J.

Art Unit

3768

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-21,23 and 24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-21,23-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 7, 9, 12, 14 – 15, 17-18, 21, 23 as amended are rejected under 35 U.S.C. 103(a) as being unpatentable over Emery (US6610011, of record).

Emory is directed to the structure or manufacture and use of an ultrasound scanning probe having a transducer array and an engagement sensing mechanism for sensing engaging contact with the subject scanned such that applied power towards scanning may be increased.. Whereas Emery in the main would teach evaluation of the reflected ultrasound towards the contact monitoring purpose, col. 5 line 59 – col. 6 line 12 suggest that, alternative to the reflected ultrasound-based algorithm control, one

may use physical sensors in the probe to detect use and provide feedback control, including sensors of motion, tissue reflectivity or thermal sensors. Although Emery does not explicitly state that these independent physical sensors detect 'engagement with the subject' as called for in the claim to the degree of inherency necessary for anticipation (since motion might conceivably include handling motion by the operator, tissue reflectivity might indicate proximation prior to engagement, thermal might pertain to self-heating due to activation and so on), it would have been inherently obvious to use at least the tissue reflectivity sensor to sense active engagement with the subject. In effect this is tantamount to the distance (proximity) sensor which applicants list in specification para [0015] as a category of physical sensor.

Since Emery entertains pick up by the user, this implies a handheld probe body.

For temperature to be used for proximity sensing of the body a differential change of measurement must be had with respect to the hand holdable probe..

Claims 4, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emery as applied to claims 3, 18 above, and further in view of Chiang et al (US5957846) since whereas the former is a beamformer system with a handheld scanhead the patent does not teach placing the beamformer within a handheldable body portion. However it would have been obvious in view of the latter for example 10, 26 of Fig. 4 and e.g. Fig. 33 and col. 32 discussion to place the beamformer within the scanhead for portability whereupon the heat dissipation requirement becomes greater as per 1045 in the col. 32 discussion. Such that the Emery technique would be advantageous if portable beamforming is practiced.

Claims 5 – 6, 20, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emery as applied to claims 1, 18 or 23 above, and further in view of Akisada et al (US6183426, of record) insofar as whereas the former does not suggest a pressure sensor apart from the ultrasonic piezoelectric elements, it would have been obvious in view of Akisada et al to use a pressure-sensitive element to detect loading since Akisada et al suggests in col. 1 that the applicable background to his invention is both diagnosis and therapy; Emery evidencing the use of piezoelectric material per se for physical engagement sensing and the use of a thermal sensor as well as suggesting using combined sensor combinations.

Claim 8, 10-11, 13, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emery as applied to claim 1 above, and further in view of Whitney et al (US5396891, of record) since whereas the former does not entertain such for proximity sensing, it would have been obvious in view of the latter to use a manually operable switch to sense physical body contact as a form of coupling engagement.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

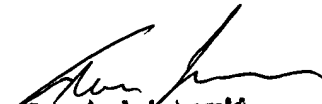
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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Jaworski Francis J. at telephone number 571-272-4738.

FJJ:fjj

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Francis J. Jaworski  
Primary Examiner